

## Abstract of Disclosure

[0039] A network security system designed to provide per-packet encryption based on an encryption key identifier and an associated encryption key. Packets or groups of packets are encrypted based on information that relates to the packet such as service type, network number, and the like. This encryption criterion is associated with an encryption key and encryption key identifier. When a packet contains the certain criteria, the packet is encrypted using the encryption key. The packet is sent across the network using the encryption key identifier and the encrypted payload. The targeted nodes decrypt the packet using the reverse process.